## INTRODUCTION

The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) created the Transportation Enhancement (TE) program. Ten percent of the funds within the Surface Transportation Program (STP) of the Federal-aid Highway Program are reserved for TE program. Subsequent Federal legislation has made minor changes in the TE program and it remains a permanent part of the Federal-aid Highway Program. Projects implemented under the TE program must be one or more of the following activities:

- 1. Provision of facilities for pedestrians and bicycles
- 2. Provision of safety and educational activities for pedestrians and bicycles
- 3. Acquisition of scenic easements and scenic or historic sites including historic battlefields
- 4. Scenic or historic highway programs including the provision of tourist and welcome center facilities
- 5. Landscaping and other scenic beautification
- 6. Historic preservation
- 7. Rehabilitation and operation of historic transportation buildings, structures, or facilities including historic railroad facilities and canals
- 8. Preservation of abandoned railway corridors including the conversion and use thereof for pedestrian or bicycle trails
- 9. Inventory, control and removal of outdoor advertising
- 10. Archaeological planning and research
- 11. Environmental mitigation to address water pollution due to highway runoff or reduce vehicle-caused wildlife mortality while maintaining habitat connectivity
- 12. Establishment of transportation museums

A project to be funded in the TE program must meet two basic conditions:

- 1. The proposed action must be one of the activities listed above, and
- 2. The proposed action must be related to the surface transportation system.

All of the approved TE applications are reviewed to assure that each project meets these requirements. As the projects are developed, the proposed work is reviewed to assure that the work to be completed with federal TE funds meets the requirements of the program.

All TE projects must meet the normal requirements of the Federal-aid highway program as if it were a typical highway project. Due to the modest scale of most TE projects, simplified procedures are used to satisfy many of the requirements. Prompt attention to each of the necessary steps will assure that each project is completed in a timely manner.

Federal funds available under the TE program will pay for up to 80 percent of the total project cost. The Sponsor's local match must be at least 20 percent of the total project cost. The local match may be cash, in-kind services, or donated services, materials, or real property. The federal TE funding award may be used in any or all of the three

project phases of preliminary engineering, right-of-way, and construction. Most Sponsors use their own funds to complete the preliminary engineering and right-of-way phases and use the TE funds for construction. This approach simplifies the project management process by reducing the number of administrative actions that need to be taken.

For funding purposes, all transportation projects are divided into three phases:

- 1. Preliminary Engineering (PE) pre-construction work items such as planning studies, environmental documentation, design plans, right-of-way plans, and construction bid documents
- 2. Right-of-Way (ROW) property acquisition
- 3. Construction (CST) project implementation

Each TE project is approved for funding in one or more of these phases. Each Sponsor receives a letter notifying them of the federal TE funding award. The TE award amount may be less than the amount requested which will exclude some aspects of the project. This circumstance requires development of a revised scope of work for the project, which will be reviewed and approved by GDOT. If you have any questions concerning your funding award or project scope, contact your GDOT TE Project Manager.

The amount of federal TE funds allocated to each project is fixed and will not be increased under any circumstances. The Sponsor is responsible for any costs in excess of the awarded TE amount needed to develop and complete the approved project.

The federal TE funds are allocated as part of the Federal-aid highway program. Federal funds are made available to projects on a cost reimbursable basis, i.e., the Sponsor must incur the expense before federal TE funds are paid to the Sponsor. Procedures have been established to make payments to the Sponsor as soon as practicable to minimize cash flow problems for the sponsoring agency.

# **INNOVATIVE FINANCING (TE Local Match)**

Innovative financing refers to an approach that permits Sponsors greater flexibility in matching Federal TE funds. All TE projects must meet the minimum obligation of a 20 percent local contribution. In addition to local government funds, Sponsors may use sources such as private cash donations and funds from other Federal or State agencies to pay the local matching share. Other sources of the Sponsor's local match may include in-kind contributions and donated services, materials and real property on a case-by-case basis. Federal funds from agencies of the U.S. Department of Transportation may not be used to match the federal TE funds.

To assist in taking advantage of this flexibility, the GDOT created an innovative financing methodology for the PE and/or ROW phases. This methodology allows the Sponsor to pay all costs of the PE and/or ROW phases with local funds. The Federal TE funds are then used in the other project phases. Innovative financing allows the

Sponsor's 100 percent local contribution in the PE and/or ROW phases to count toward the overall project local match obligation. This methodology is recommended for all TE projects that meet the conditions described below.

In the PE phase, the innovative financing methodology allows the Sponsor to pay all costs of the PE phase using local funds only. If the local funds are used to obtain the services of a consultant and the cost of these services will be used as a part of the local match obligation, the Sponsor must follow the requirements of the Official Code of Georgia 50-22, Managerial Control Over Acquisition of Professional Services, and GDOT TOPPS Directive 4020, Consultants/Service Contracts.

In the ROW phase, the innovative financing methodology allows the Sponsor to pay all the costs of the ROW phase using only local funds and credit those amounts toward the local matching share. The Sponsor must comply with the requirements of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, even when using only local funds for the ROW acquisition.

The amount of local funds expended for PE and/or ROW is certified by the Sponsor and made part of the TE Agreement for the ROW and/or CST phases. The certified expenditures will apply toward the Sponsor's local match obligation. Any remaining local match obligation is paid during the other project phases. The federal TE funds are therefore reserved for the other phases of the project as identified in the project approval letter. Sponsors who do not follow this methodology will not be allowed to credit the local money spent for PE and/or ROW toward the local match obligation.

For Sponsors to participate in Innovative Financing of PE and/or ROW, the following conditions must be met:

- 1. The Sponsor's TE application must identify local funding for the PE and/or ROW phases;
- The Sponsor must submit for GDOT approval a work plan, schedule, and budget showing how the project will be accomplished using Innovative Financing for PE and/or ROW;
- 3. The Sponsor must execute the Audit Certification of Compliances and send in their latest A-133 Audit; and
- 4. The Sponsor and GDOT must jointly execute the Innovative Financing Memorandum of Understanding (MOU).

The Innovative Financing MOU is an agreement between the Sponsor and GDOT concerning the Sponsor assuming responsibility for PE and/or ROW. The MOU enables the Sponsor to apply eligible PE and/or ROW expenditures as part of the local match of the total project cost.

The Sponsor and the GDOT TE Project Manager will jointly determine whether costs associated with the PE and/or ROW phase are eligible to count towards the Sponsor's local match. Eligible PE costs include costs of consultant selection; preparation of environmental documentation, design plans, right-of-way plans, and construction bid

documents; construction contract advertisement and award; and other administrative tasks related to the project. Eligible ROW costs include property records research, relocation assistance, property appraisal, property acquisition, and document preparation.

The Sponsor must certify in the Authorizing Resolution of the TE Agreement the sum of the local contribution made by the Sponsor in the PE and ROW phases. This amount will then be credited towards the Sponsor's local match.

## **ROW DONATIONS**

Donated real property may be credited towards the Sponsor's local match obligation. The credit is based on the fair market value of the land or other real property as approved by the GDOT Office of Right-of-Way. To be eligible for the credit, the real property may not be part of a current transportation facility. If the property is acquired in anticipation of the TE project, it must be acquired in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, and coordinated with GDOT. Donated right-of-way is eligible to be credited toward the local match only after GDOT approves the fair market value.

## **DONATED SERVICES AND MATERIALS**

In-kind contributions or donated labor and materials may be credited towards the Sponsor's local match obligation. These credits normally apply during the construction phase, but in-kind contributions in other phases may be credited on a case-by-case basis. Sponsors who propose to use donated labor and materials must document the reasonable value of these donations to GDOT.

## STEP-BY-STEP PROCESS FLOW

The TE Process Flow Chart outlines the major steps in implementing a TE project. This section will provide information on each step in the process.

## **APPLICATION APPROVED**

Upon selection of an approved project, the Sponsor is notified of the federal TE funding award. This notification will include the amount of TE funding by project phase, if appropriate. Copies of the Innovative Financing MOU and the Audit Certification of Compliances will be sent with the notification of the award. The Sponsor should return these forms within 30 days of receipt.

In some cases, the federal TE award amount will be less than requested in the application. If a lesser amount is awarded, the Sponsor should immediately begin to plan what can be accomplished using the lesser amount, including a reduction in the scope of the project. When returning the executed MOU and Audit Certification of

Compliances, the Sponsor must include for GDOT approval a work plan, schedule, and budget showing how the project will be accomplished.

A Sponsor's Checklist has been developed to assist Sponsors in managing the progress of TE projects. A copy of the checklist is included in the Appendix.

#### **AUDIT CERTIFICATION OF COMPLIANCES**

The Sponsor is required to execute the Audit Certification of Compliances as part of the MOU process. By executing the certification, the Sponsor is certifying that the Sponsor with comply with the following requirements:

- 1. Procurement requirements of 49 CFR 18.36, Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments, and 23 CFR 635 Part A, Contract Requirements,
- 2. State audit requirements of Official Code of Georgia Section 36-81-7, Requirement of Audits, and
- 3. Federal audit requirements of OMB Circular A-133, Audits of States, Local Governments, and Non-Profit Organizations.

Along with the Audit Certification of Compliances, the Sponsor is required to send in their latest A-133 Audit to ensure compliance with federal requirements. If a PE consultant contract is estimated to cost more than \$250,000 a pre-award audit of the consulting firm is required to assure the firm has the appropriate accounting procedures in place.

## **EXECUTE MOU**

The Innovative Financing MOU is a mechanism which allows the Sponsor to credit its expenditures and donated services, materials, real property toward the local 20 percent matching share of the total project cost. By signing the MOU, the Sponsor also agrees to the procedures and requirements related to the TE program.

After all parties have signed the MOU, the GDOT TE Project Manager will issue a Notice To Proceed (NTP) for PE to the Sponsor to begin the work on the TE project. The effective date stated in the NTP is very important because only those local expenditures occurring after that date can be credited to the local matching share.

If federal TE funds are to be used in the PE phase, the PE work may not begin until a TE Agreement is executed and a NTP for PE is issued by GDOT.

## **SELECT CONSULTANT**

This step applies to Sponsors who plan to hire a consultant to develop the project concept, environmental documentation, architectural or construction plans, and construction bid documents. If the Sponsor wants the costs for obtaining a consultant to apply toward the TE local matching requirement, the Sponsor must have received a

NTP for PE from the GDOT TE Project Manager as described in the previous section "Execute MOU."

The procedure used to obtain consultant services must be in accordance with the requirements of the Official Code of Georgia 50-22, Managerial Control Over Acquisition of Professional Services, and GDOT TOPPS Directive 4020, Consultants/Service Contracts.

When advertising for consultant services, public notice of the request for proposal should be given for at least 15 days prior to the selection of the three or more most highly qualified firms. Such public notice shall be given by publication at least once in the Georgia Procurement Registry and may be given by publication in one or more daily newspapers in general circulation. The notice should include a general description of the proposed project; indicate what selection method shall be used; and the procedure by which interested persons may apply for consideration for the contract.

The GDOT maintains a list of prequalified consultants who have met minimum requirements and qualification standards by class of work. Sponsors are required to engage prequalified consultants for their TE projects whether using TE funds or only local funds for PE work.

Consultants are prequalified based on classes of work. In addition to traditional highway planning, design, and construction work, GDOT has added two classes of work applicable to TE projects – Class 3.13 Facilities for Pedestrians and Bicycles and Class 3.14 Historic Rehabilitation. Sponsors may obtain prequalification lists from the GDOT Prequalification Office at 404-656-5250 or from the Internet at:

http://tomcat2.dot.state.ga.us/cmis/byclass/index.html

#### PREPARE CONCEPT REPORT

A concept report must be completed for each TE project. The concept report documents the scope of the work to be completed using the awarded TE funds.

The concept report is used also by the GDOT to communicate information about the proposed TE project. This communication makes various offices within GDOT aware of the project, its significant design features, and its relationship to the State Highway system. This information is critical to assure that proposed improvements to the State transportation system are implemented in a coordinated manner.

The concept meeting is optional and is held at the discretion of the Sponsor and the GDOT TE Project Manager. For minor projects within or crossing GDOT ROW, the GDOT TE Project Manager and the Sponsor will discuss the need for the concept meeting to decide whether a concept meeting will be held. For projects outside GDOT ROW, a concept meeting may still be necessary if there are important issues, such as utilities, railroads, or wetlands.

The Sponsor is responsible for coordinating the concept meeting. The GDOT TE Project Manager will assist the Sponsor in identifying the appropriate GDOT staff to be invited to the meeting. At the meeting, the Sponsor should present the project concept and respond to questions. A draft concept report should be available prior to the concept meeting. Following the meeting, the Sponsor should work with the GDOT TE Project Manager to resolve outstanding issues and questions.

The Sponsor will revise the concept report as appropriate and submit it to the GDOT TE Project Manager for review and approval. The concept report should be approved before submission of the environmental documents.

The concept report form is included in the Appendix.

#### **ENVIRONMENTAL CLEARANCE**

All TE projects are required to comply with the National Environmental Policy Act of 1969 (NEPA). Environmental compliance requires documentation of the TE project environmental effects and review by applicable State and Federal agencies. Since TE projects are designed to enhance the transportation system, most TE projects do not have significant adverse environmental impacts. Therefore, compliance and review will usually be accomplished using a Categorical Exclusion (CE) finding.

Section 106 of the National Historic Preservation Act of 1966 requires all Federal agencies to consider ways to avoid or mitigate the adverse effects on historic properties whenever a federally funded project affects such properties. To implement this requirement, every TE project must be reviewed by the Department of Natural Resources, Historic Preservation Division (HPD). The worksheet and other information related to the Section 106 review are included in the Appendix. The worksheet must be completed and submitted to the GDOT Project Manager for appropriate review and coordination.

The HPD will have additional involvement in every project affecting historic resources. The HPD must be kept informed throughout all preconstruction and construction activities. The Sponsor should consult with the HPD during the earliest stages of project development. The HPD staff will arrange a site visit to evaluate the project's historic resources and will guide the Sponsor through the Section 106 review process. The HPD staff can be contacted at 404-656-2840. A response from the HPD indicating that the TE project has no effect or no adverse effect must be received before the CE can be submitted for approval.

The Section 106 review process takes approximately 45 days.

The CE form and instructions are included in the Appendix. The Sponsor should complete this form, sign it, and submit it to the GDOT Project Manager for appropriate review and approval by the Federal Highway Administration. The Sponsor cannot

proceed with property acquisition and construction work until the CE has been approved.

The CE review and approval process takes approximately 30 days.

Section 4(f) of the Department of Transportation Act of 1966, now codified as 49 U.S.C. Section 303 (also 23 U.S.C. 138), requires that projects using funds from the U.S. Department of Transportation avoid the use of land of a public park, recreation area, wildlife or waterfowl refuge, or historic site unless there is no prudent and feasible alternative and the project includes all possible planning to minimize harm to the resource. The Federal Highway Administration has developed guidance on meeting the Section 4(f) requirements for TE projects in a very efficient and straightforward manner. If your project has involvement with lands protected by Section 4(f), contact the GDOT Project Manager for assistance. The CE cannot be approved until the Section 4(f) requirements have been satisfied.

As part of the environmental phase of project development, the Sponsor should allow the general public the opportunity to comment on the proposed TE project. The Sponsor should hold or offer the opportunity for an informal public meeting, public information meeting, or public hearing.

If six months have passed since the approval of the CE, an Environmental Validation Form must be completed before TE funds can be authorized for either ROW or CST work. If the scope of work or ROW requirements has changed or if the environmental studies are not accurate based on current conditions, then an Environmental Reevaluation Form must be completed. The Environmental Validation Form and the Environmental Reevaluation Form are included in the Appendix. The appropriate form should be completed and submitted to the GDOT TE Project Manager.

No ROW can be acquired either by donation or purchase until the CE is approved, right-of-way plans are approved, and the GDOT TE Project Manager issues an Authorization to Proceed with Right-of-Way Acquisition.

#### **COMPLETE DESIGN PLANS**

Sponsors are responsible for furnishing the design and engineering services for preparation of preliminary plans, right-of-way plans, final construction plans, and for all matters related to the relocation of utilities.

General and specific design criteria are found in the various GDOT approved design guidelines. The Sponsor must insure that the project meets GDOT design standards; the GDOT Standard Specifications for the Construction of Transportation Systems, 2001 Edition; applicable American Association of State Highway and Transportation Officials (AASHTO) Guidelines; and Americans with Disabilities Act (ADA) requirements and guidelines. Information on applicable design standards and specifications, the ADA, and requirements for plans for landscaping and for pedestrian and bicycles

facilities is included in the Appendix. The Sponsor is expected to follow GDOT plan format as described in the Plan Presentation Guide.

TE projects located on or crossing the State Highway System (On-System projects) are reviewed differently than Off-System projects. For On-System projects, GDOT is directly concerned with the project design for those portions of the project within the GDOT ROW and the design plans will be reviewed by the District Office, Area Office, and, in some cases, the Office of Maintenance or Office of Bridge Design.

For projects not on the State Highway System (Off-System projects), the GDOT Project Manager will review the design plans. For Off-System projects involving bridges or retaining walls, the Office of Bridge Design will also review the design plans.

The following review process is used for On-System TE projects:

- 1. The Sponsor will submit six sets of 90% preliminary plans to the GDOT TE Project Manager who will distribute the plans for review. For projects having bridges or retaining walls, two additional sets of plans are needed for review by the GDOT Office of Bridge Design. The GDOT TE Project Manager will submit two copies of the plans to the GDOT District Preconstruction Engineer and one copy to the GDOT Area Engineer, and, if required, one copy to the GDOT Office of Maintenance and the HPD. The reviewing offices will provide their comments within three weeks to the GDOT TE Project Manager who will forward the comments to the Sponsor. The Bridge Office has six weeks to review the plans. The HPD has 30 days to review the plans.
- 2. The Sponsor will submit to the GDOT TE Project Manager the same number of revised plans after considering comments from previous reviews. The GDOT TE Project Manager will distribute the plans to the offices making comments in the same manner described above. The reviewing offices will provide their comments within three weeks to the GDOT Project Manager who will forward the comments to the Sponsor. The Bridge Office has six weeks to review the revised plans. The review cycle will be repeated until all reviewing offices have approved the plans.
- 3. The Sponsor will submit three sets of final construction plans to the GDOT TE Project Manager for formal approval.

The following review process is used for Off-System TE projects:

- 1. The Sponsor or consultant will submit one copy of the 90% preliminary design plans for review by the GDOT TE Project Manager. The GDOT TE Project Manager will submit comments to the Sponsor within three weeks. One additional set of plans is needed if the HPD has requested an opportunity to review the 90% plans. The HPD has 30 days to review the plans. For projects having bridges or retaining walls, two additional sets of plans are needed for review by the GDOT Office of Bridge Design. The Bridge Office has six weeks to review the plans.
- 2. The Sponsor will submit to the GDOT TE Project Manager one set of revised plans after considering comments from previous reviews. Two additional sets

are required if the Office of Bridge Design made comments on the original plans. The GDOT TE Project Manager will review and return the plans with comments within three weeks of the submittal date. The Bridge Office has six weeks to review the revised plans. The review cycle will be repeated until all reviewing offices have approved the plans.

3. The Sponsor will submit three sets of final construction plans to the GDOT Project Manager for formal approval.

As part of the design phase, the Sponsor should consider allowing the public the opportunity to review and comment on the proposed design of the TE project

## **ACQUIRE PROPERTY**

TE funds cannot be used to improve private property. The Sponsor or another government agency must own in fee simple or have a long term interest through leases or easements for all property incorporated into the project. The Sponsor can acquire or obtain an interest in any private property using local funds or property donation. TE funds are eligible for right of way (ROW) acquisition in rare instances, such as scenic easements.

Property must be acquired in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (42 U.S.C. 4601, et. seq. and 49 CFR Part 24) (Uniform Act). These requirements must be met whether or not federal TE funds are used in the property acquisition. Specific guidelines for complying with the federal requirements are included in the Appendix.

If property acquisition, including permanent or temporary easements, is required, the Sponsor must submit three paper copies of the ROW plans for review and approval by GDOT. For reviews following the initial review, only one paper copy is required. Once the plans are satisfactory, two Mylar copies of the plans are submitted for formal approval. This procedure must be followed regardless of whether local or federal TE funds are being used to acquire ROW or easements. The ROW acquisition phase cannot begin until the GDOT TE Project Manager issues an Authorization to Proceed with ROW Acquisition. The categorical exclusion and the ROW plans must be approved before the Authorization to Proceed with ROW Acquisition can be issued.

While the ROW acquisition process has many steps, each step is intended to preserve both the rights of the property owner and the acquiring agency. Once the needed ROW is identified by ownership and on plats, the owner(s) are given a copy of the brochure "What Happens When Your Property is Needed for a Transportation Facility" and a receipt is obtained from the owner. The brochure is available from the GDOT District Office Local Government Coordinator. The receipt form is included in the Appendix.

The next step is to notify the property owner that he/she has the right to:

1. Receive payment based on the appraised fair market value;

- 2. Donate the property and chose whether to receive an appraisal of fair market value; or
- 3. Accept an amount of money or services based on an estimate of appraisal calculation including a waiver of the right to inspect the property during the appraisal process. (This option is available only for property valued under \$10,000.)

The owner is asked to select the option to be used for the acquisition. The forms related to this step are included in the Appendix. During the discussions with the owner, the Sponsor may notify the owner, if such is the case, that no funds are available to purchase the property.

When purchasing property using either federal TE funds or local funds, the Sponsor must have an appraisal for each parcel approved by GDOT, unless the property owner voluntarily donates the property. Only GDOT approved appraisers may be used for preparing appraisals. The list of approved appraisers is available from the GDOT District Office Local Government Coordinator. These approved appraisers have received training on the requirements of the Uniform Act and will have the knowledge to properly prepare the appraisal documentation. Even though GDOT-approved appraisers prepare the appraisals, all appraisals for property to be acquired using federal TE funds or local funds must be reviewed and approved by GDOT prior to acquisition of the property.

As part of the acquisition process to obtain the property, whether through purchase using either local or federal TE funds or by donation, the owner is eligible for reimbursement of certain incidental expenses. This notification form is included in the Appendix.

No property acquisition negotiations may take place until the Sponsor has received Environmental Clearance for the project, ROW plans have been approved, and an Authorization to Proceed with ROW Acquisition has been issued by the GDOT TE Project Manager.

If negotiations to purchase the property were commenced prior to applying for Federal TE funds, the negotiations must cease as soon as the Sponsor submits the application. If federal TE funds are to be used in acquiring property, the acquisition process may not begin until a TE Agreement is executed and a NTP for ROW is issued by GDOT. The Sponsor should coordinate closely with GDOT on property acquisition procedures. The Sponsor shall not begin negotiations until environmental clearance is obtained and the project ROW plans are reviewed and approved by GDOT. The GDOT TE Project Manager is responsible for initiating preparation of the NTP for ROW.

If federal TE funds are used to acquire property, a real property agreement between GDOT and the local government Sponsor must be signed. This agreement indicates the ratio of federal funds used to acquire the property and provides that if the property is ever sold that the local government will reimburse to the GDOT the fair market value of

the property at the indicated ratio. A copy of the real property agreement is included in the Appendix.

Government agency condemnation of property is usually limited to projects that are seen as critical to the public good. The GDOT believes that TE projects are desirable improvements to local resources, but are not necessarily critical improvements. Therefore, if a local government desires to condemn property for a TE project, it is the responsibility of the local government to determine whether the TE project is critical to the public good.

#### **ROW CERTIFICATION**

After all ROW has been acquired or is otherwise available for the project, the Sponsor must submit a Right-of Way Certification Form signed by the City or County Attorney certifying to GDOT that all property is publicly owned and any real property purchases followed the requirements of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended. This form is included in the Appendix.

If additional ROW was acquired for the project through purchase, lease, or easement, regardless of whether local or Federal TE funds were used, the Certification Form is to include a plat or plan sheet showing the relationship of the acquired ROW to the project. An individual plat for each affected parcel is not necessary or desired if the same information can be provided using a plan sheet.

#### PREPARE CONSTRUCTION PLANS AND BID DOCUMENTS

The development of good construction plans depends on having complete design plans and reliable quantities. Good construction plans will allow the development of an accurate construction estimate by the Sponsor and submission of reasonable construction bids from the contractors. Construction plans that include all the proposed work and are error-free are the foundation for an accurate estimate, reasonable bids, and a fully functional completed project.

#### **CONSTRUCTION COST ESTIMATES**

Accurate construction estimates are vital to the construction bid process. The following information will help Sponsors to develop construction cost estimates.

#### Labor

The Davis-Bacon Act requires that workers on projects located on Federal-aid highways be paid a predetermined minimum wage rate. The wage rate is determined by the U.S. Department of Labor. The GDOT Project Manager will assist the Sponsor in determining if the TE project is located on a Federal-aid highway and whether Davis-

Bacon applies to the TE project. Volunteer labor contributed to the work that is part of a construction contract is not allowed if Davis-Bacon applies to the project. Davis-Bacon wages rates can be found on the Internet at:

http://www.access.gpo.gov/davisbacon/

#### **Materials**

Materials and materials suppliers used on TE projects must be listed in the GDOT Qualified Products List. The Secretary of the Interior Standards for Rehabilitation of Historic Properties must be followed for projects involving historic buildings and structures.

#### CONSTRUCTION BID DOCUMENTS

Since Federal TE funds are used to pay for project construction costs, the Sponsor must include certain required contract provisions and other documents in the bid package. The required bid documents will be provided to the Sponsor with the approved TE Agreement. To insure compliance with the federal requirements, the Sponsor must submit one copy of a bid package that includes the advertisements, instructions to bidders, bid form, and supplemental specifications to the GDOT TE Project Manager for review and approval. The basic specifications to be used are the GDOT Standard Specifications for the Construction of Transportation Systems, 2001 Edition.

Showing preference to contractors based on their geographic location, to labor forces based on their residence, or to certain materials based on location of their origin is prohibited with the exception of the Buy America provision in the GDOT specifications.

#### **DBE GOAL**

The GDOT establishes an annual aggregate Disadvantaged Business Enterprise (DBE) goal for all Federal-aid highway projects. To achieve this aggregate goal, the GDOT sets an individual goal for each federally assisted highway project including TE projects. When setting the goal, GDOT considers factors such as the project's proximity to a pool of certified DBE contractors in that area, project cost, and type of work.

To obtain a DBE Goal, the Sponsor must send a construction cost estimate in electronic format to the GDOT TE Project Manager. The construction cost estimate is sent to the GDOT DBE Committee, which meets monthly to assign DBE goals to individual projects. Since the Committee meets monthly, the cost estimate including major bid items must be submitted early enough to assure that bid date schedule can be meet. The GDOT TE Project Manager will take the necessary actions to obtain a DBE Goal and will inform the Sponsor. The specific DBE Goal is included in the TE Agreement and the bid documents.

Sponsors are responsible for insuring that the contractor proposes to use qualified DBE firms to meet the goal for their project. To be considered qualified, DBE firms must be certified with the GDOT Equal Employment Opportunity (EEO) Office. The GDOT Certified DBE Directory is available from the GDOT EEO Office at 404-656-5323 or on the Internet under "Contractor Directories" at:

http://www.dot.state.ga.us/specialsubjects/bus\_opport/index.shtml.

Bidders failing to meet the DBE goal requirements may be declared "non-responsive" if they have not made a good faith effort to meet the DBE goal. After opening bids, the Sponsor must submit to the GDOT TE Project Manager the successful bidder's DBE Goals Form listing the proposed certified DBE subcontractors. The DBE Goals Form is included in the required construction contract provisions that are provided to the Sponsor and is included in the Appendix.

During construction, the Sponsor must provide the GDOT Project Manager copies of all DBE subcontracts. The Sponsor must also submit the DBE Participation Report monthly to the GDOT Area Engineer. The DBE Participation Report is submitted monthly because of the short duration of most TE projects. This report is included in the Appendix.

### **EXECUTE TE AGREEMENT**

A TE Agreement is needed for any phase of a project using TE funds. Since most projects use federal TE funds only for construction, the TE Agreement is discussed here. If federal TE funds will be used in PE or ROW phases, the same requirements apply.

The Sponsor and GDOT enter into a contract for the phase or phases using federal TE funds. This contract is referred to as the TE Agreement to distinguish it from the Sponsor's contracts with consultants or construction contractors. Sponsors should become familiar with all terms of the TE Agreement and ask the GDOT Project Manager for clarification as needed.

The TE Agreement specifies the obligations of the Sponsor and GDOT in regard to the TE project; defines the project scope of work and funding levels; and describes the invoicing procedures. Sponsors are reimbursed for TE project costs according to the terms of the TE Agreement.

The Sponsor is required to develop certain documents necessary for the final TE Agreement. These documents are:

- Authorizing Resolution and
- Opinion of Counsel.

The GDOT TE Project Manager will forward three original copies of the TE Agreement, which includes the Audit Certification of Compliances, to the Sponsor for execution. The Sponsor signs these three copies, inserts copies of the Authorizing Resolution and the Opinion of Counsel, and returns the TE Agreement to the GDOT TE Project Manager for execution by GDOT. All copies of the TE Agreement and attachments must have original signatures. One copy of the fully executed TE Agreement will be returned to the Sponsor.

The TE Agreement may be signed any time after the federal TE funding is authorized.

#### ADVERTISE CONSTRUCTION PROJECT

The GDOT must issue an Authorization to Advertise for Bid Proposals before the Sponsor may advertise for bids. Before the Authorization to Advertise can be issued the environmental clearance, right-of-way certification, and construction plans must be approved; the Federal Highway Administration must authorize the federal TE funds; and the Sponsor must sign the TE Agreement. The Sponsor must follow the State law on competitive bid processes (Official Code of Georgia 32-2, excluding that provision which provides for negotiations) and document all activities related to the process.

Construction work must be advertised and awarded to the lowest reliable bidder through an open, competitive bid procedure.

An example of a bid advertisement is included in the Appendix. The advertisement is published at least two weeks in advance of the bid opening and once again one week after the first advertisement. The minimum advertising period is two weeks.

If the Sponsor's originally approved project proposal requested the use of federal TE funds to pay for PE, then the Sponsor may use federal TE funds to pay for the cost of advertising. If the Sponsor did not request the use of federal TE funds for PE, then the Sponsor may not use federal TE funds to pay for the cost of advertising.

#### SELECT CONTRACTOR

#### **Prequalified Bidders**

A bidder must be prequalified with GDOT before submitting a bid over \$2,000,000. If the construction work involves welded structures such as pedestrian bridges, the manufacturer of the bridge must be on the GDOT Qualified Products List 60, Welded Structures. If a single subcontract is over \$500,000, the subcontractor must be registered with GDOT. For more information on prequalification, contact GDOT at 404-656-5250. List of prequalified and registered contractors can be found on the Internet under "Contractor Directories" at:

http://www.dot.state.ga.us/specialsubjects/bus\_opport/index.shtml

#### **Bid Bonds**

All construction contractors who bid on federally funded TE work are required to include a bid bond with their bid. The bid bond is a firm commitment consisting of a bond, certified check, or negotiable instrument submitted with the bid as assurance that the bidder will, upon acceptance of his/her bid, execute such contractual documents as may be required within a specified period of time. The bid bond is usually 5 percent of the submitted bid.

#### **Performance and Payment Bonds**

Section 103.05 of the GDOT Standard Specifications describes the requirements for the performance and payment bonds. The requirements differ for Georgia Resident Contractors and Nonresident Contractor. In summary, contractors who are awarded a construction contract are required to post a performance bond equal to 100% of the contract amount and a payment bond of 110% of the contract amount. These bonds are to assure completion of the construction contract and payment to all persons supplying labor and materials for the contracted work and of related state taxes.

#### **Force Account**

The only exception to competitive bidding is the Sponsor's use of its own labor force, equipment, materials, and/or supplies (material alone is not allowed). This arrangement is called Force Account Work. If the Sponsor intends to use its own local forces to accomplish any of the work, the Sponsor must prove, in a comparative manner, that the Sponsor can do the work at less cost than by using a contractor. The construction work must be estimated as if a private contractor would be doing the work. If the private contractor estimate is less than the Sponsor's force account estimate, then a private contractor must be used. If the force account work is less expensive, local forces may be used after approval by GDOT. The Davis-Bacon requirement does not apply to force account work. The Project Manager can provide necessary guidance if this option is chosen. A copy of the Force Account Work Request Form is included in the Appendix. The Force Account Work Request Form is completed by the Sponsor and submitted to the GDOT TE Project Manager for approval.

## **Selecting the Lowest Reliable Bidder**

Federal law prohibits negotiation with any of the bidders. If the contract is awarded, it is to be awarded to the lowest reliable bidder whose proposal meets all the prescribed requirements. If bids are above the Sponsor's cost estimate, the Sponsor may not negotiate with the lowest bidder to bring the costs within the estimate. The Sponsor must either:

- Revise the plans and estimate, re-advertise, and re-bid the project; or
- Accept the lowest reliable bid and accept responsibility for the cost difference.

The amount of federal TE funds available for a project is a fixed amount and all costs in excess of the available federal funds are the Sponsor's responsibility. Also, the Sponsor should be aware that selection of the lowest bidder is not mandatory if it can be shown that the lowest bidder did not meet all of the prescribed requirements. Such a bid is declared "irregular" or "unresponsive."

Before awarding the contract, the Sponsor must submit the following to the GDOT TE Project Manager:

- The bid tabulations for all bidders and
- The completed DBE Goals Form for the lowest bidder.

Upon receiving the above material, the GDOT TE Project Manager will:

- Review all bid tabulations for mathematical accuracy and to assure that the contractor is prequalified, if required, and
- Review the DBE Goals Form to determine if all DBE firms listed on the form are certified by GDOT and whether the DBE goal is met and, if not, what good faith efforts were made to achieve the DBE goal.

The GDOT TE Project Manager will complete the bid evaluation form and make a recommendation on whether to award the contract to the low bidder. After recommendation to award the contract to the low bidder, GDOT will issue a NTP with Construction. The NTP with Construction may not be issued until all parties have signed the TE Agreement.

After the Sponsor receives the NTP with Construction, the Sponsor may award the contract to the lowest reliable bidder. The Sponsor may not allow the contractor to begin work until the Sponsor receives the NTP with Construction. The review of the bid and related material by the GDOT TE Project Manager is very important and awarding the contract before receiving the NTP with Construction may result in the loss of Federal TE funds for the project.

#### CONSTRUCT PROJECT

After the Sponsor awards the construction contract, the Sponsor must provide copies of the contractor's construction contract and the final construction plans to the GDOT Area Engineer. A list of the GDOT Area Engineer offices and addresses is included in the Appendix. The Sponsor must hold a pre-construction conference with the contractor and invite the GDOT Area Engineer.

The GDOT Area Engineer has responsibility for the following activities:

- Spot oversight and inspection of the project
- Progress verification
- Material testing of all materials typically used in highway construction
- Processing the monthly invoice from the Sponsor.

The Sponsor is responsible for providing continuous project inspection, oversight, and administration.

The Sponsor must coordinate construction efforts with the Area Engineer. Although inthe-field changes are primarily handled between the Sponsor and the contractor, the Sponsor should review the suggested changes with the Area Engineer. Copies of any change orders between the Sponsor and the contractor are to be submitted to the Area Engineer and the GDOT TE Project Manager. If the changes will affect the amount to be paid the contractor, the GDOT TE Project Manager will prepare a TE Change Order to change the amount to be reimbursed to the Sponsor.

If the suggested changes represent a fundamental departure from the project's work scope and/or budget, they must be reviewed and approved by the GDOT TE Project Manager. If necessary, the GDOT TE Project Manager will prepare a supplemental agreement to amend the TE Agreement work scope and/or project budget.

## **Materials Testing**

The contractor must use materials and procedures that comply with the construction contract, approved design plans, and specifications. GDOT will perform materials testing of all materials typically used in highway construction that will become a permanent part of the traveled way and its safety appurtenances. The Sponsor must notify the Area Engineer when the contractor intends to place concrete or asphalt mixtures.

For all other materials, the Sponsor will certify that all material suppliers and materials conform to the requirements of the contract, plans, and specifications. These materials will be expected to comply with generally accepted industry standards for the individual items.

When the project is completed, the Sponsor must submit a materials certification statement to the Area Engineer as part of the closeout procedure. A sample materials statement is included in the Appendix. If the materials incorporated into the completed construction work do not comply with GDOT Standard Specifications or other acceptable industry standards, the Sponsor will be asked to correct the problem and/or return any federal funds distributed to them as payment for the inadequate materials. After the materials are determined to be in compliance, the GDOT Office of Materials and Research will issue a Materials Certification. The Materials Certification is necessary to complete project closeout procedures.

#### **Progress Reports and Invoices**

The Sponsor shall submit invoices, DBE Participation Report, contractor progress reports, billing documents, and any other backup information to the Area Engineer on a monthly basis. GDOT will make progress payments of the Federal contribution based on work completed. The GDOT Area Engineer will process invoices for 100 percent

reimbursement of the Federal contribution. Construction reports will be sent from the Area Engineer to the GDOT Contract Administration Office for payment per standard GDOT procedures. Payment to the Sponsor will be made within one month of receiving the monthly invoice.

The DBE Participation Report, monthly invoice, and the monthly project progress report are included in the Appendix.

## **Wage Requirements**

The Davis-Bacon Act establishes minimum wage requirements on federally funded projects located on Federal-aid highways. The GDOT Project Manager will inform the Sponsor if the Davis-Bacon Act applies to the project. If so, the Sponsor must check the contractor's payroll to determine whether the construction contractor is complying with the Davis-Bacon Act.

## **Site Visits and Inspections**

The GDOT Area Engineer will conduct spot inspections to verify progress. For designated projects, the Department of Natural Resources, Historic Preservation Division (HPD), will conduct site visits at approximately 50 percent and 100 percent project completion for projects involving impacts on historic resources. The Sponsor is responsible for contacting the HPD at the appropriate times to arrange these site visits. Approval of the monthly invoices will not be made without satisfactory site visit reports.

#### **Record Keeping**

The Sponsor is responsible for maintaining accurate and thorough project records. Materials certificates, building permits, insurance documents, and other records should be kept organized and secured in file folders. A daily project diary shall be kept for the project. The Area Engineer can show what a project diary looks like on a typical highway project. GDOT field personnel typically note things like the weather, the names of contractor/subcontractor's representatives, topics discussed in the field, summary of work performed, and site visits from other State or Federal agencies.

## **Project Closeout**

The Project Closeout process consists of the Sponsor submitting the completed Statement of Final Project Expenditures form, Certification of Final Acceptance form, final DBE Participation Report, final invoice, and materials certification statement to the Area Engineer. The GDOT Office of Materials and Research will review the materials certification statements and any material documentation. If the materials are determined to be in compliance, GDOT will issue the Materials Certificate. The Area Engineer will inspect the project for compliance with the plans and specifications. If the contractor's work is determined to be in compliance, the Area Engineer will process the final construction report, thereby initiating GDOT's project closeout procedures.

Payment of the final invoice will be made to the Sponsor at the conclusion of the closeout process. A copy of the Statement of Final Project Expenditures form including appropriate invoices shall be sent to the GDOT TE Project Manager.

## **Project Maintenance**

By executing the TE Agreement, the Sponsor assumes the full responsibility for the continued operation and maintenance for all project improvements in perpetuity, including the grass strip between the curb and gutter and the sidewalk within the project limits, at no additional cost to GDOT. GDOT and the Federal Highway Administration reserve the right to conduct periodic site inspections for the purpose of confirming proper operation and maintenance of the project.

The Sponsor is required to complete a self-certification form annually for the economic life of the project. As a general rule, the economic life for major building rehabilitation work costing \$100,000 or more is 20 years and, for all other projects, the economic life is 5 years. The economic life of the project is specified in the TE Agreement. The certification form is provided annually to the Sponsor each year. GDOT conducts spot inspections on completed TE projects throughout the economic life of the project. This procedure is to ensure proper maintenance and operation of the facility. An example of the inspection form is contained in the Appendix.

### DETERMINE THE FINAL TE AMOUNT

After the project is completed, the final amount of TE funds will be determined based on the Statement of Final Project Expenditures form. The total cost of the TE project is the sum of the costs shown on the Statement of Final Project Expenditures for project administration, preliminary engineering, right of way acquisition, and construction. The construction cost should include the cost of construction inspection incurred by the Sponsor.

If the total cost is greater than the estimated cost in the TE Agreement, the amount of federal TE funds available for the project remains the same and the Sponsor is responsible for all costs in excess of the awarded TE funds. The GDOT TE Project Manager will initiate a TE Change Order to increase the GDOT construction report amount up to the amount of the awarded TE funds, if necessary.

If the total cost is less than the estimated cost in the TE Agreement, a TE Change Order will be initiated by the GDOT TE Project Manager to establish a revised GDOT construction report amount. GDOT will reimburse the Sponsor for 80 percent of the revised construction report amount up to the amount of the awarded TE funds.

#### **CONDUCT FINAL AUDIT**

When must a final audit be performed?

Upon completion of the project, a final cost audit of the project is required if the project involved planning or preliminary engineering. The Sponsor's records will be audited to verify that billed costs have been accurately recorded and are reasonable and allowable in accordance with OMB Circular A-87's cost principles.

#### **Additional Discussion**

Upon completion of the project, a final cost audit of the project is required. Three areas of the project will be audited – Sponsor, consultants, and construction.

#### **Audit of the Sponsor**

If an A-128 audit has been performed, GDOT will try to use this audit information to perform the final cost audit of the Sponsor.

If the A-128 audit cannot be used, GDOT will perform the final cost audit. The Sponsor's records will be audited to determine if the billed costs have been accurately recorded to the project account. If there has been any Force Account work the audit will determine if billed costs are adequately supported by proper accounting records, i.e., subsidiary account records, general ledger entries, payroll records, timesheets, invoices, cancelled checks, etc. All costs will be reviewed to determine reasonableness and allowability in accordance with OMB Circular A-87 cost principles.

#### **Audits of Consultants**

There will be no audits of consultants that the Sponsor contracts with unless the final consultant contract is an actual cost plus fixed fee contract and amounts to \$250,000 or more or if the audit is performed by special request. If an audit is required, GDOT will determine if proper accounting records adequately support the billed costs, i.e., subsidiary account records, general ledger entries, payroll records, timesheets, invoices, cancelled checks, etc. All costs will be reviewed to determine reasonableness and allowability in accordance with 48 CFR Part 31, the Federal Acquisition Regulations.

#### **Audits of Construction Contractors**

If the Sponsor has had an A-128 audit performed for all periods in which contract costs were incurred, there will not be an audit of the construction costs by GDOT. Cost allowability will be based upon the A-128 audit. In those cases where there is no A-128 audit, GDOT will simply confirm that payments to the contractor were made in accordance with the terms of the TE Agreement and that they are properly supported by the Sponsor's records and have been accurately billed to GDOT. GDOT will not audit the contractor's records.

## **Questioned Costs**

Any questioned cost arising as a result of reported noncompliance with federal laws and regulations will be reported to contract management for proper resolution. Sponsors will be liable for all questioned cost resulting from noncompliance by them or their subcontractors with federal laws and regulations or the terms of the contract with GDOT. The resolution of questioned costs, if any, is to be reported to the External Audit Unit.